

Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 67, 68 and 71-86 are pending in the application, with claim 67 and 78 being the independent claims. Claims 69 and 70 are sought to be cancelled without prejudice to or disclaimer of the subject matter therein. New claims 74-86 are sought to be added. Claims 67 and 73 are amended herein. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Description of the Invention

The Examiner has rejected the claims under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description because, according to the Examiner, the written description provides support only for a gel in a gel buffer having a pH between 6 and 8, wherein the gel buffer comprises bis(2-hydroxyethyl) iminotris (hydroxymethyl) methane. Applicants have amended claim 67 to recite that the gel is made from a gel buffer having a pH between 6 and 8.

However, the written description does have support for the pH of a gel distinct from the pH of a gel buffer. For example, the specification in Examples 8-13 includes

the pH of the “final gel solution.” The pH of the “final gel solution” is equivalent to the pH of the gel itself.

Thus, applicants have added claim 74 and 81 which specifically recite a separating gel having a pH of about 7. Support for a separating gel having a neutral pH (wherein an exactly neutral pH is known to those skilled in the art to be a pH of exactly 7) can be found throughout the specification. For example, at page 11, lines 28-31, the specification recites “Applicants also describe another gel and buffer system for separation of macromolecules (including DNA, RNA, polypeptides and proteins) wherein separation occurs at neutral pH.”

In light of Applicants’ amendments to the claims and the remarks above, Applicants respectfully request the withdrawal of this 35 U.S.C. § 112, first paragraph rejection.

Rejections under 35 U.S.C. § 102

Claims 67-73 were rejected under 35 U.S.C. § 102(b) as being anticipated by Clayton *et al.* (*Journal of the Fisheries Research Board of Canada* (1972) 29(8):1169-72), U.S. Patent No. 5,171,410 to Guadagno *et al.*, and Schroeder *et al.* (*Journal of Chromatography* (1976), 118:295-302). Claim 67 was amended to recite a gel for electrophoresis comprising acrylamide. Thus, the “starch gel” of Clayton *et al.*, the “agarose” gel of Guadagno *et al.*, and the “CM-cellulose” medium of Schroeder *et al.* do not disclose the use of acrylamide, as recited in the claims of the present invention.

Further, claims 67-73 were rejected under 35 U.S.C. § 102(b) as anticipated by Ratliff *et al.* (*Infection and Immunity* (1993), 61(5): 1889-94). Applicants have amended claim 67 to recite an acrylamide gel for use in electrophoresis. The “ACA 54 gel filtration column” method disclosed in Ratliff *et al.* is not an electrophoresis method, and thus these references do not disclose the invention as claimed.

Claims 67-73 were also rejected under 35 U.S.C. § 102(b) as anticipated by Wiltfang *et al.* (*Electrophoresis* (1991), 12(5):352-66). Applicants have amended claim 67 to recite that the gel is a separating gel. Wiltfang *et al.* do not disclose a separating gel with a gel buffer having a pH in the range as claimed in independent claim 67. As such, Wiltfang *et al.* does not disclose the separating gel of the present invention.

In light of these amendments and the remarks made above, Applicants respectfully request the withdrawal of these 35 U.S.C. § 102(b) rejections.

Rejections based on Obviousness-type Double Patenting

Claims 67-73 were rejected under the judicially created doctrine of obviousness-type double patenting in view of the claims of U.S. Patent Nos. 6,059,948, 6,096,182, and 5,578,180. Applicants submit herewith a terminal disclaimer under 35 U.S.C. § 1.321 to remove this rejection. In light of this submission, Applicants respectfully request the withdrawal of this rejection.

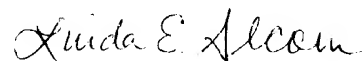
Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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